

SPDES Permit No. NY0028410

Long Term Control Plan Semi-Annual Status Report Reporting Period: *January through June 2015*

Amended Administrative Order CWA-02-2014-3033 (Amends CWA-02-2012-3024)

September 2015

BUFFALO SEWER AUTHORITY

Long Term Control Plan Semi-Annual Status Report Reporting Period: January through June 2015

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1. INTRODUCTION

The Buffalo Sewer Authority (Authority) received approval of its Long Term Control Plan (LTCP) from the United States Environmental Protection Agency (USEPA) and New York State Department of Environmental Conservation (NYSDEC) on March 18, 2014. The Authority entered into an Amended Administrative Order, on April 16, 2014 (herein after referred to as the AAO), with the USEPA. This AAO establishes a schedule for implementation of the Authority's LTCP, approved by the USEPA and NYSDEC.

The AAO in part requires that the Authority submit written Semi-Annual Status Reports to the USEPA and NYSDEC by September 1st for current year January 1– June 30 reporting period, and March 1st for the previous calendar year July 1 – December 31 reporting period. The AAO requires that the following be provided in each Semi-Annual Status Report:

- The project milestones, deadlines and other terms that the Authority is required to meet since the date of the last Semi-Annual Status Report, whether and to what extent the Authority has met those requirements, and the reason for any anticipated delays and/or noncompliance.
- A general description of the work completed during the reporting period and the applicability of the work to meet indicated design criteria, as well as the projection of work to be performed during the next reporting period and any anticipated delays for the upcoming work. Any changes in key personnel must also be noted.
- Enclosure of public meeting (if held) materials including: advertisements, handouts, formal meeting notes, and a summary of the meeting.
- Copies (to USEPA only) of all monthly monitoring reports or other reports pertaining to CSOs and bypasses that BSA submitted to the NYSDEC during the reporting period.

This report covers January through June 2015 which serves as Semi-Annual Report No. 3.

2. REQUIREMENTS DUE IN REPORTING PERIOD

Attachment A provides the current status of all projects listed in the Amended Administrative Order. Issues with implementing these projects are detailed in Section 4 of this document.

This document serves as the September 1, 2015 semi-annual report.

As discussed at the June 25, 2015 meeting between BSA, NYSDEC, and USEPA, Certificates of Acceptance and Occupancy for completed projects are included in Attachment B and design reports for green infrastructure designed and/or constructed to date is included in Attachment E on disc.

3. WORK COMPLETED IN CURRENT REPORTING PERIOD AND PROJECTION OF WORK TO BE PERFORMED NEXT REPORTING PERIOD

A general description of the work completed on LTCP projects during the reporting period (January 1 through June 30, 2015) and the work projected to be performed during the next reporting period (July 1 through December 31, 2015) is provided in Attachment A. Work to be completed after the current or next reporting period has been grayed out.

As agreed at October 21, 2014 meeting between the BSA and the agencies, a more detailed description of each project including the location and the goal to be achieved through each project is provided in Attachment C.

4. IMPLEMENTATION ISSUES

4.1 Bird and Lang RTC Projects

As noted in the previous Semi-Annual Reports: on the Bird and Lang RTC Projects there were construction delays aggregating several weeks due to inclement weather, easement acquisition, submittal and fabrication delays for the actuators and stems, and a delayed radio path study. An additional delay has occurred due to a late determination by National Grid that the existing utility poles which were to have provided power to the projects will need to be replaced due to their age (a six week process further complicated by the snow pack and frigid temperatures). Additionally, legal issues relating to obtaining an easement have necessitated rerouting of power for the Bird Avenue site between the project and the utility pole. A final issue arose due to a delay in the restoration of a light standard on Bird Avenue upon which the Bird RTC Project antenna is to be mounted. As a

result, while the Lang RTC Project has now been energized, the Bird RTC Project has not. Once these projects are energized, optimization will commence.

4.2 Smith Street Storage

The Smith Street Storage project has undergone several conceptual level redesigns that have reduced capital and maintenance costs and negative impacts to the environment and residents, however these redesigns have also resulted in a prolonged engineering period. In order to expedite construction, the Smith Street storage project has been separated into an in-line storage project and a partial sewer separation project. The engineering for the partial sewer separation project was completed just after the March 18, 2015 deadline set forth in the AAO on April 6, 2015. The engineering for the Smith Street in-line storage project was completed on June 10, 2015. Construction of the partial sewer separation project is currently ongoing. The Notice to Proceed for the Smith Street in-line storage project is expected to be issued in early 2016. Completion of construction of the overall Smith Street storage project is expected by March 18, 2017.

4.3 SPP 075 Optimization

As part of the Smith Street Storage project, modifications of SPP 075 were proposed, however detailed field investigations of the local system and the chamber have demonstrated that the proposed changes may not have the expected impact and will be put on hold until post-construction monitoring of this basin is completed.

4.4 SPP 331 Optimization

Preliminary plans for SPP 331 were for the diversion of flows from this point through a new sewer to Bird Avenue along the centerline of Elmwood Avenue. This would have required major disruption of a very high traffic commercial area and was deemed impractical. Plans have instead been developed to divert flows through connected system weir modifications. These modifications include raising the weir at SPP 180 by 1.75' and the bench located in SPP 332 on the northeast quadrant of Gates Circle which currently directs dry weather flows into the interceptor, will be removed and replaced with a 6.2' weir and restored sewer trough which will direct dry weather flows into the Bird Avenue trunk sewer. This solution, as modeled, achieved similar results and was preferred over the conceptual level solution. Substantial completion of this project is expected on or before March 18, 2017.

4.5 SPP 341A Optimization

Based on detailed site condition investigations, the SPP 341A optimization project will not be constructed at this time as detailed site investigations have demonstrated that the proposed modification may not achieve the predicted results and will be put on hold until post-construction monitoring of this basin is completed.

4.6 Hamburg Drain Optimizations

Preliminary design for the Hamburg Drain Optimizations was begun prior to January 1, 2014 however detailed design has been delayed due to high water levels in Lake Erie. As a result of this delay the March 18. 2016 Notice to Proceed deadline is expected to be exceeded and a new date of June 18, 2017 has been suggested by the consulting engineers currently charged with design for these projects (See Attachment D). Note that this project will encompass several distinct smaller projects which may include inline storage, sewer separation, and/or green infrastructure. These projects will be lumped together into logical contracts in order to ensure economies of scale and quality work.

4.7 WWTP Improvement Project Alternative C

BSA has determined that grit is present in the aeration tank influent channels and feed lines to the aeration tanks. This deposit is compromising flow into the tanks and through secondary. The influent channel levels rise as high flow is restricted from flowing into aeration tanks. BSA has engaged a contractor to clean out this channel. This will require closing the sluice gate to one side and draining the channel in order to clear the solids. The first side to be done is the west (B) aeration gallery. This will force all flows to the east side (A) aeration galley.

This needs to be done to verify performance of the primary bypass construction project. It will be done as quickly as is possible. This is a precursor to the primary clarifier evaluation as part of the WWTP improvement project C2. The full amount of grit in the channels will be determined when draining is complete which will determine length of time required to complete cleaning. Once started, the Contractor will work until completion.

It is expected that engineering will still be completed on or before March 18, 2019, the first stage of construction will begin by March 18, 2017, and all construction will be completed by March 18, 2022.

5. CHANGES IN KEY PERSONNEL

Regina Harris was appointed Junior Sanitary Engineer on February 2, 2015.

6. PUBLIC MEETINGS

No public meetings have been held regarding the LTCP or projects associated with the LTCP during this reporting period.

7. MODEL MODIFICATIONS

The process of converting the hydraulic model from XP-SWMM to PC-SWMM has been postponed until the model is recalibrated. No new model modifications were made during this reporting period

8. CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Oluwole A. McFoy, P.E., General Manager

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Date